September 19, 2012

Instructions for Submitting MOVES County Database (CDB) Files

For the 2011 National Emission Inventory (NEI) submissions, EPA prefers to receive data instead of emissions as they allow for more in-depth analysis and consistent, integrated emissions in the NEI. If you do not submit onroad input data, EPA will generate emission estimates using national defaults.

The method for submitting onroad emissions (as opposed to inputs) will be unchanged from the 2008 cycle. Emissions must be from an EPA-approved onroad emissions model, which currently means MOVES or California's EMFAC.

Since the MOVES inputs are county-based, tribal agencies should run MOVES and submit emissions. However, tribal agencies could use the input information from adjacent counties to inform them on local inputs that may be suitable for their tribal area MOVES runs.

For state and county agencies planning to submit emissions, we strongly encourage them also to submit their customized MOVES inputs as well. These are typically stored in, and must be submitted to EIS as, a County Database (CDB) that is a set of MySQL tables specifically formatted to store local inputs for MOVES. Prior to submitting MOVES inputs, agencies will be able to download EPA's default CDBs containing MOVES inputs by state from EIS. This default set will be in the proper format and, as detailed below, contains a mix of state-supplied data from the 2008 NEI, MOVES national defaults, and placeholders where 2011 data has not yet been collected or where EPA may use additional information.

The NEI is run covering all months of the year and all counties in every state, plus District of Columbia, Puerto Rico, and US Virgin Islands. This means that EPA will need to have county level information for every county for each month of the year. In order for MOVES to utilize this county specific data, MOVES will be run at the County Scale. This requires a separate county database for each county to be run containing the county specific data.

On a county by county basis, agencies can change the CDBs as needed to reflect their own input data, or they may choose to use the provided defaults. Agencies must run their CDB submittals through the provided QA Tool that will generate a QA Report to include with submittals. Agencies should submit their CDB submittal package to the EIS QA environment to confirm there are no critical errors prior to submitting to production. Agencies that want to accept EPA's defaults and submit nothing may do so as with any other category via a 'support request' message through the EIS gateway.

Each CDB submittal is a total replacement to any CDBs previously submitted by that agency. Thus, if a state submits every county in one submittal, then submits only one county in a subsequent submittal, only the one county will be present in EIS.

The following sections describe how to create/revise CDBs, QA check them, and submit to EIS.

Supporting tools and files referenced here can be downloaded from the 2011 webpage: http://www.epa.gov/ttn/chief/net/2011inventory.html in the section "EPA Mobile Resources"

1.1 County Databases

States are asked to supply the CDBs tables listed in the table below. The table indicates the contents of the CDBs and what data EPA uses as defaults. It is expected that states will have more accurate information in most cases.

EPA has a document, "Using MOVES to Prepare Emission Inventories in State Implementation Plans and Transportation Conformity: Technical Guidance for MOVES2010, 2010a and 2010b" (EPA-420-B-12-028, April 2012), which describes what data states are being asked to provide and suggestions on how to obtain the needed information. You can obtain a copy of this document on the EPA web site at:

http://www.epa.gov/otaq/models/moves/index.htm

The CDB tables are intended to contain the complete set of information needed to run MOVES for all of the vehicles in a county for all months of a single calendar year (2011) using county specific information.

Table 1: CDB Tables and Contents

CDB Table	Description of Content	EPA-Default CDB Table Content
auditlog**	Information about the	Carried forward from the creation of the tables
	creation of the database	for 2008 by EPA. These records reflect the
		earlier importing and not the current status of
		the data.
Avft**	Diesel sales fractions	Empty
avgspeeddistribution	Average speed distributions	National average EPA estimates.
county	Description of the county	EPA provided data.
dayvmtfraction	VMT distribution across the	Distribution of VMT for the 2008 NEI were
	type of day	carried forward.
fuelformulation	Fuel properties	Based on EPA estimates for each county from
		calendar year 2009. These will be updated
		with estimates for 2011 when the data becomes
		available.
fuelsupply	Fuel differences by month of	Based on EPA estimates for each county from
	the year	calendar year 2009. These will be updated
		with estimates for 2011 when the data becomes
		available.
fuelsupplyyear	Year for the fuel properties	2011
hourvmtfraction	VMT distribution across the	National average EPA estimates.
	hours of the day	
hpmsvtypeyear	Total annual VMT by HPMS	VMT data values that have been grown from

	vehicle type	the 2008 NEI VMT values using ratio of an initial national VMT estimate for 2011 divided by the 2008 total VMT. These will be updated with estimates for 2011 when the data becomes available.
imcoverage	Description of the Inspection and Maintenance program	I/M program description carried forward from the 2008 data and may include state supplied data, but were not altered to account for any changes since the 2008 submittal.
monthymtfraction	VMT distribution across the months of the year	National average EPA estimates.
roadtype	Description of the road types	EPA provided data.
roadtypedistribution	VMT distribution across the road types	National average EPA estimates.
sourcetypeagedistrib ution	Distribution of vehicle ages	Age distributions are national average defaults. Age distributions previously provided by states for other calendar years have not been carried forward to 2011.
sourcetypeyear	Vehicle populations	Vehiclepopulation data values that have been grown from the 2008 NEI vehicle population values using ratio of an initial national VMT estimate for 2011 divided by the 2008 total VMT. These will be updated with estimates for 2011 when the data becomes available.
state	Description of the state	EPA provided data.
year	Year of the database	2011
zone	Allocations of starts, extended idle and vehicle hours parked to the county	EPA provided data. Allocations must all be 1.0 (100%). This data should not be changed.
zonemonthhour	Temperature and relative humidity values	Temperature and humidity data are EPA provided data for each county from calendar year 2009. 2011 calendar year temperature and humidity data will be used when the data become available.
zoneroadtype	Allocation of road types to the county	EPA provided data. Allocations must all be 1.0 (100%). This data should not be changed.
countyyear*	Description of the Stage 2 program	The optional CountyYear (Stage 2 refueling emission control programs) uses EPA default values for each county.
emissionratebyage*	Implementation of California standards	The EmissionRateByAge tables for some counties have been populated using the appropriate data described in the guidance for states adopting California emission standards. See notes below ***
sccroadtypedistributi on*	Allocation of results to SCC categories	EPA provided data. EPA provided county specific data will be used unless local data is

	provided.

*Tables that are not created by MOVES County Database Manager (CDM), but are generated as empty tables by the QA tool that checks CDBs for EIS submittal

**Tables that can be empty but must be present in EIS submittal

*** The following states were given early NLEV programs in the EPA defaults:

- California (6)
- Connecticut (9)
- Delaware (10)
- District of Columbia (11)
- Maine (23)
- Maryland (24)
- New Hampshire (33)
- New Jersey (34)
- Pennsylvania (42)
- Rhode Island (44)
- Vermont (50)
- Virginia (51)

The following states were given California LEV programs beginning on the following dates:

FIPS State ID	State Name	LEV Program Start Year
6	California	1994
9	Connecticut	2008
10	Delaware	2014
23	Maine	2001
24	Maryland	2011
25	Massachusetts	1995
34	New Jersey	2009
35	New Mexico	2016
36	New York	1996
41	Oregon	2009
42	Pennsylvania	2008
44	Rhode Island	2008
50	Vermont	2000
53	Washington	2009

1.1.1 County Database Naming Convention

In order to keep track of the thousands of CDBs used in the NEI calculations, EPA has established a naming convention for the CDB names that will differentiate between databases and make automation of running and processing the inputs and outputs from MOVES easier.

The naming convention for each CDB folder has 20 characters. The first 6 characters identify the county, the next 5 indicate the calendar year of the county database, and the last characters indicate the date on which the database was created.

The first 6 characters are the letter "c", followed by the 5 digit Federal Information Processing Standard (FIPS) code for the county, including a leading zero when necessary. The next 5 characters are the letter "y", followed by a 4 digit calendar year. This calendar year indicates the calendar year of the data contained in the database. A CDB can only contain data from a single calendar year. The last 8 digits, following and underscore character, are the date on which the database was created in a YYYYMMDD format.

An example of a CDB name is "c26161y2011_20120601" where this CDB names indicates "c26161" refers to the county FIPS code (in this case Washtenaw County, Michigan). "y2011" refers to the calendar year for the county database and "20120601" identifies the database modification date of June 1, 2012, in YYYYMMDD format.

1.2 Steps to Submit CDBs

- 1. Create CDBs
 - a. Edit existing CDBs to meet NEI requirements or
 - b. Create new CDBs from scratch or
 - c. Revise EPA defaults.
- 2. Run EPA's QA Tool to create a QA report that confirms no errors exist.
- 3. Create a Checklist indicating where changes have been made to the EPA CDBs
- 4. Provide documentation for the Agency- supplied inputs.
- 5. Submit the files to the EIS.

1.2.1 <u>Creating County Databases</u>

A CDB is a folder that contains a set of MySQL formatted tables that contain county specific information in the format used by MOVES. When submitted CDBs are used as input to MOVES during a run, MOVES will recognize the tables contained in the folder (based on their name and format) and use the information they contain instead of EPA default values. In this way, a MOVES run can be made more representative of the county to be simulated.

There are many ways to create a county database for submission. We will discuss some of the methods that we expect might be used and provide some suggestions. The methods we will discuss are:

- Using the County Data Manager
- Using XML scripts
- Using MySQL

We will also discuss automating the creation of multiple CDBs using the methods.

If you have existing CDBs that can be used for the NEI with little or no editing, using these would be your best option. Otherwise, EPA suggests starting with the EPA-provided default databases and editing their contents as the easiest way to quickly produce a set of CDBs for your

state. However, any method that can generate appropriate tables containing the county specific data in the appropriate format that can be recognized and used by MOVES are acceptable.

Since the CDBs will be in a MySQL format, it is helpful to have some MySQL database application skills, including using standard query language (SQL). However, there are tools available that can help to view, alter and export MySQL tables that can help. The MySQL Query Browser is distributed with the MOVES application and provides a graphical user interface (GUI) that allows tables to be viewed, altered and exported without SQL commands. We recommend that this application be available for use when creating and editing databases.

Since MySQL CDBs are simply folders containing files which make up the tables, this allows users to simply move and copy the folders and the files they contain as they would any other files on their drives. This feature provides some additional flexibility in generating new CDBs, since these folders and files can be manipulated using standard DOS commands in batch files and scripts.

Step by step instructions of how to use MySQL query commands to alter the contents of tables is beyond the scope of this document. This approach should only be considered by states with available staff familiar with query language. The discussion here of creating and editing CDBs will cover alternatives to using query language alone.

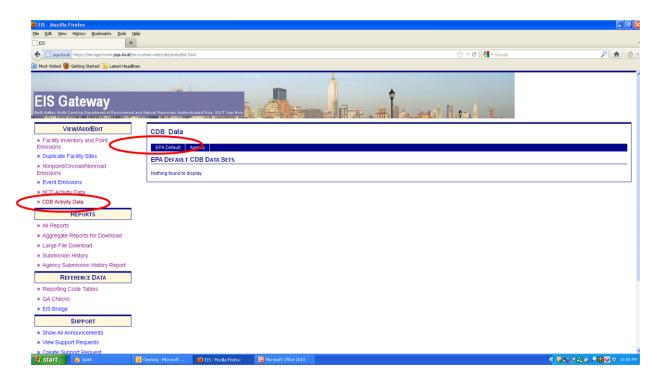
1.2.1.1 Using Existing County Databases

For the NEI, EPA prefers to receive existing CDBs that states/local agencies have created for their own use. These may need to be updated with the NEI year (2011) and expanded to cover all months of the year using some of the editing tools described below. They also need to be checked for errors with our NEI CDB QA Tool as explained in Section 1.2.2.

1.2.1.2 Editing EPA Default Databases

EPA has provided a set of all CDBs for calendar year 2011 containing EPA default values. States can download the default CDBs from EIS and make changes. States only need to submit CDBs for counties for which they have made changes. Counties that are not submitted will use EPA default estimates. However, EPA encourages states to review the information found in these databases and make changes where better county specific information is available.

To retrieve the EPA CDM default tables, log into the EIS Gateway, go to the "View/Add/Edit" link, choose "CDB Activity Data", "EPA Default", and find your state's CDB zipped data base to download as indicated by the figure below.



The EPA-provided CDBs should be loaded into your MySQL database system by copying the CDB folders into the MySQL\data directory.

The EPA CDBs can be edited directly in several ways. First, the MySQL Query Browser allows users to change values in database tables, one value at a time. If only a few changes are needed, this may be the easiest way to make changes. If many changes are needed, the user should consider other options.

The MOVES County Data Manager (CDM) can be used to export the contents of most of the tables found in the CDBs into spreadsheets or comma separated value (CVS) text files to be edited. Once the changes have been made, the CDM can clear the old data and import the new values from the files. This process does not involve using any query language code or knowledge of database commands. However, it requires making the changes one table, one database at a time. The XML scripts described below can also be used to import data from spreadsheets or CSV text files containing altered information directly into existing EPA default CDBs. By including only tables that contain county specific data, you can limit the tables affected by the XML code to just the tables that will contain the county specific data and keep the default data in the other tables. These updates can be automated to apply to multiple databases at once to apply the changes quickly to all of the counties affected.

Of course, the data in any tables can be manipulated directly using MySQL query language.

1.2.1.3 Using the County Data Manager

The MOVES graphical user interface (GUI) is designed to allow users to create and edit CDBs without using database language commands (SQL) through the use of "importers" contained in

the CDM GUI panels. Once data has been imported into a county database, the CDM can generate a XML script that can be used to recreate the database from the input files using the command line interface option of MOVES. The XML feature is useful if many changes are being made or are expected to be made to the input files. The process of creating CDBs using the CDM is described in detail in the MOVES User Guide. Using the CDM to create CDBs will require that you create a run specification for each county for which you wish to create a county database. You can download an example run specification file (c10001y2011.mrs) from the 2011 NEI webpage.

1.2.1.3.1 Tables not Created by the CDM

The CDBs created by the CDM do not contain all of the tables expected by EPA in an EIS submittal. However, the CDB QA Tool that is required to be run on all CDBs submitted by states will generate (empty) tables in all tested databases and provide an indication in the report that the tables were initially missing. This script will not populate the tables with data. This will need to be done manually if content is needed in these tables.

• The EmissionRateByAge table is intended to contain information related to the use of California standards, which is not contained in the MOVES default database and must be obtained separately. The default CDBs provided by EPA already have data in the EmissionRateByAge table for all counties in states that we believe are using California standards. You should not add data to the EmissionRateByAge table if you have not implemented California standards in your state. You can find out more about how to model California standards and obtain the emission rate data on the EPA web site at:

http://www.epa.gov/otaq/models/moves/tools.htm

- The CountyYear table includes fields describing a county's Stage II program to reduce refueling emissions. The default CDBs provided by EPA already have data in the CountyYear table for all counties that we believe have these programs.
- The SCCRoadtypeDistribution table allocates emissions from MOVES roadtypes to SCC Roadtypes. Including this table on the list allows states that have updated this table to submit those updates. Other states may leave this table blank.

1.2.1.4 Using XML Scripts

"XML" stands for EXtensible Markup Language, which is a markup language much like HTML used by web browsers. However, XML was designed to carry data, not to display data. MOVES has a feature that allows users to supply specific XML information that can be used by MOVES to construct CDBs from a set of spreadsheets or CSV text files. This feature can be used to quickly create CDBs without using the MOVES graphical user interface (GUI) and automate the process to create multiple CDBs using a single command.

The MOVES CDM Tools panel can create XML files that can be used to create CDBs. Since XML files are simply text files, the XML file can be edited using any text editor (such as Notepad) to create new XML files that can generate more CDBs. Using naming conventions for the data files and CDBs, modelers may create a set of XML files that will create all of the CDBs for a state. These XML files can be run together in a batch mode to create all of the CDBs for a state using the command line option of MOVES and a DOS batch file. The creation and use of importer XML files is addressed in the MOVES User Guide in Section 2.3.3.3 Tools (http://www.epa.gov/otag/models/moves/index.htm#downloading).

EPA has created a XML template for creating CDBs for submission to the NEI. This XML template can be used instead of creating a template XML using the MOVES CDM. A ZIP file on the 2011 NEI webpage (generic_cdb_creator.zip) includes the instructions for using the XML template and how to edit the XML code for individual counties, using an example set of spreadsheets. The example also includes an example batch file for running multiple XML files.

The XML approach does assume that the states will have all of the information needed for the CDBs for every county to be processed and that this information can be found in the proper format in a set of spreadsheets or CSV text files. The automated process of creating the databases can be repeated whenever the contents of any of the spreadsheets or CSV text files is updated.

1.2.1.5 Using MySQL

All of the tables in the CDBs can be created or edited directly using MySQL commands. Step by step instructions of how to do this is beyond the scope of this document. However, in some cases, it may be useful to use MySQL directly, rather than the tools being provided by EPA. There is no restriction on the use of MySQL or other tools in the creation of the CDBs, as long as the resulting product is properly formatted and populated for use with MOVES.

1.2.1.5.1 Converting Databases from Other Calendar Years

In some cases, states may have CDBs for other calendar years that would make a good start for creating CDBs for the 2011 calendar year. As discussed above a database folder can be easily copied and renamed to reflect a new calendar year. The contents of the tables can then be edited to change the calendar year to 2011, which would allow the tables to be used with a run specification that selected the 2011 calendar year. This editing can be done manually using the MySQL Query Browser, one entry at a time, but is better done using simple MySQL query commands as shown below.

There are seven tables normally found in a CDB that contain calendar year information. These values can be easily changed to a new calendar year using a series of "update" commands. Below is an example of the set of update commands to change the calendar year of the tables to 2011. The "use" command selects the database to be altered. The "c26161y2011_20120601" string refers to the database name, following the EPA naming convention for CDBs. The

"c26161" refers to the county FIPS code. "y2011" refers to the calendar year for the county database and "_20120601" as a database created on June 1, 2012, in YYYYMMDD format.

```
use c26161y2011_20120601;

update countyyear set yearid=2011;

update hpmsvtypeyear set yearid=2011;

update imcoverage set yearid=2011;

update sourcetypeagedistribution set yearid=2011;

update sourcetypeyear set yearid=2011;

update year set yearid=2011;

update year set fuelyearid=2011;
```

Section 1.2.1.2 describes how to create and use a MySQL script to execute these commands.

Once the calendar year has been changed, the state or local agency is still left with the task of updating the other values in the tables to reflect the 2011 calendar year. Changing the contents of the tables using the CDM is discussed in the MOVES User Guide. The databases can be updated for 2011 using the XML importer discussed above as well.

1.2.1.6 Automating the creation of multiple databases

The XML importer scripts described in Section 1.2.1.4 above are the easiest way to create or make changes to multiple existing CDBs. The new data for the counties can reside in MS Excel spreadsheets or CSV text files and be edited in those formats or output into those formats from other applications. Using batch files and command line options in MOVES, the XML for each county can be run to create/alter the existing CDBs. A compressed data file (generic_cdb_creator.zip) can be obtained from the 2011 NEI webpage, which contains example files and instructions (Generic_CDB_Creator_Instructions.docx) for using XML files in batch files for creating or editing multiple databases.

Scripting tools (Perl, Python, etc.) can also be used to create scripts that will process multiple databases using MySQL commands to make the desired changes. You will need staff familiar with these tools. Detailed instructions for creating these tools is beyond the scope of this document, however, you may contact EPA if you intend to use this approach for suggestions.

1.2.2 Use the CDB QA Tool to Create a QA Report to include with your submittal

From the <u>2011 NEI webpage</u>, download and unzip "qa_tools.zip" which contains the QA Tool (MOVES_Input_QA_Tool.sql) and an example script (Example_Run_QA_Checks.bat) that

allows you to automate the QA process for more than one county (discussed below). MOVES_Input_QA_Tool.sql will create a QA Report that is required in your MOVES CDB submittal. The QA Report generated by the QA Tool script verifies all table contents meet range, naming convention, format and other checks. The report confirms that each CDB contains the 24 tables and that the values within those tables are valid. EIS will check to see that each county listed in this report has an associated CDB in the submission. Only include counties in the QA report that you will be submitting. If the counties in the QA report do not match those in the CDB folder, or if any errors are indicated in the QA report, EIS will indicate a critical error and will not accept the submission. Format is .txt, but this file can be opened as a table using Microsoft Excel to make it more readable.

IMPORTANT NOTE: All 24 tables are required, although some may not be populated. If you create the CDBs using the CDM (from scratch) the CDM will create 21 tables. Your CDB will be missing three tables:

- o EmissionRateByAge
- o SCCRoadTypeDistribution
- o CountyYear

Running the QA Tool will create these tables in your CDB, but the tables will all have zero rows (empty). Leaving these tables empty will not cause the CDBs to fail the script if it is run again. Thus, if you create the CDBs using the CDM, your initial run of the QA will indicate errors (missing tables). However, if you run the QA Tool again, the tables have been created by the previous check and the "missing tables" error will no longer appear in the report. You can send the second QA report (with no errors) to the EIS.

Also, the QA tool uses tables from the default MOVES database that was distributed with MOVES2010b. If you do not have MOVES2010b installed, you will need to obtain a copy of the database folder (movesdb20120410) and place it in your MySQL\data directory.

Name your QA report with your agency Program System Code (PSC), such as "PSC_QA_Report.txt". For example, Delaware's state agency PSC is "DEDNR" and their QA report would be named "DEDNR QA Report.txt".

If your state has many counties, you may wish to automate the checking process. Below is an example of a batch file written to check the three counties for the state of Delaware. The batch file deletes the old version of the report text file (named with the PSC), clears the MySQL buffer of previous work and drops the database used to store the aggregated results from the individual checks. Then MySQL is directed to each county database (i.e., c10001y2011_20120601) using the QA Tool script (MOVES_Input_QA_Tool.sql). Note that the directory path must be included so that the file can be properly located by MySQL. The path you use can be different than the location (C:\MySQL\) shown in this example. The final line in the batch file exports the

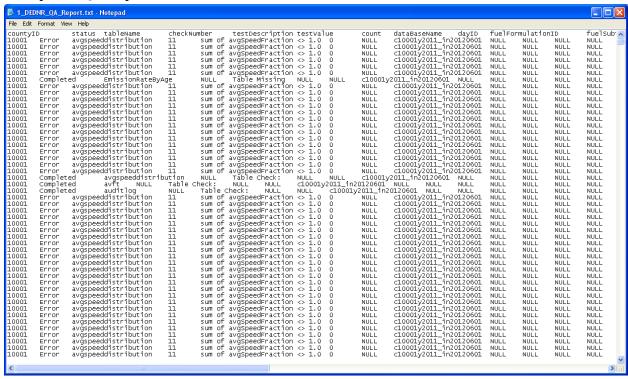
results into the report text file. A directory path can be added to this file name as well to help locate the file once it has been populated.

```
del DEDNR_QA_Report.txt mysql -e "flush tables;" mysql -e "drop database if exists all_cdb_checks;" mysql c10001y2011_20120601 < C:\MySQL\MOVES_Input_QA_Tool.sql mysql c10003y2011_20120601 < C:\MySQL\MOVES_Input_QA_Tool.sql mysql c10005y2011_20120601 < C:\MySQL\MOVES_Input_QA_Tool.sql mysql -e "select * from all_cdb_checks.all_county_database_checks;" > DEDNR_QA_Report.txt"
```

The file generated by this script (DEDNR _QA_Report.txt) is the quality assurance (QA) report required by the EIS process.

You can download this example batch file (Example_Run_QA_Checks.bat) which is contained in the zip file qa_tools.zip that is posted on the 2011 NEI webpage.

Example of QA Report Results



In this example, there is an error with the AvgSpeedDistribution table. The submission has a distribution that adds to zero (0.0). This entry (all zeros) can inadvertently eliminate any VMT associated with that combination and cause an incorrect result. The sum of the fractions in the AvgSpeedDistribution table must add to 1.0 for every combination of SourceTypeID, RoadTypeID and HourDayID, even if the Source Type, Road Type or HourDayID do not have VMT associated with that combination. Never fill distribution tables with zeros. You can use the default distribution by leaving that combination out of the table completely instead.

In this case, the submission has a distribution that adds to zero (0.0). This entry (all zeros) can inadvertently eliminate any VMT associated with that combination and cause an incorrect result. A distribution of all zeros cannot be allowed.

Name your QA report with your agency ProgramSystem Code (PSC), such as "PSC_QA_Report.txt". For example, Delaware's state agency PSC is "DEDNR" and their QA report would be named "DEDNR_QA_Report.txt".

1.2.3 Create Your CDB Checklist

From the <u>2011 NEI webpage</u>, download the QA checklist "national_county_checklist.xlsx". This spreadsheet will contain rows for every county in the nation. You can trim this list to only include the counties in your state.

This checklist indicates which tables the agency has revised from EPA's defaults for each county's CDB. It also indicates counties for which the submitter accepts EPA default estimates as equivalent to their submittal. The list you submit should include all of the counties in your state, even if you are only submitting CDBs for some of the counties.

Microsoft Excel P Delete 4 Conditional Format Cell Formatting * as Table * Styles * ## =-\$ - % , 00 .00 Sort & Find & Format * AD19 2_DEDNR_Checklist.xlsx | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | AC Accept EPA Default Values peeddistribution **fue bupphyear** stateid statename countyid countyname 10 DELAWARE 10001 Kent County 4 10 DELAWARE 10003 New Castle County 5 10 DELAWARE 10005 Sussex County R Table1 Ready **Ⅲ** □ Ⅲ 100% —

Example of Checklist

Name your checklist with your agency ProgramSystem Code (PSC), such as "PSC_Checklist.xls (or xlsx)". For example, Delaware's state agency PSC is "DEDNR" and their checklist would be named "DEDNR _Checklist.xls".

The purpose of the checklist is to provide a method to determine which parts of the state submission contain new information. This will greatly assist EPA is using this information for making projections to other calendar years.

1.2.4 Documentation

All submissions must include a documentation document. At a minimum, the documentation should address all of the changes made by the state to the EPA provided CDBs. For each change, the document should state briefly the source of the state supplied information used to populate the CDB. References to other documents with more detail are encouraged.

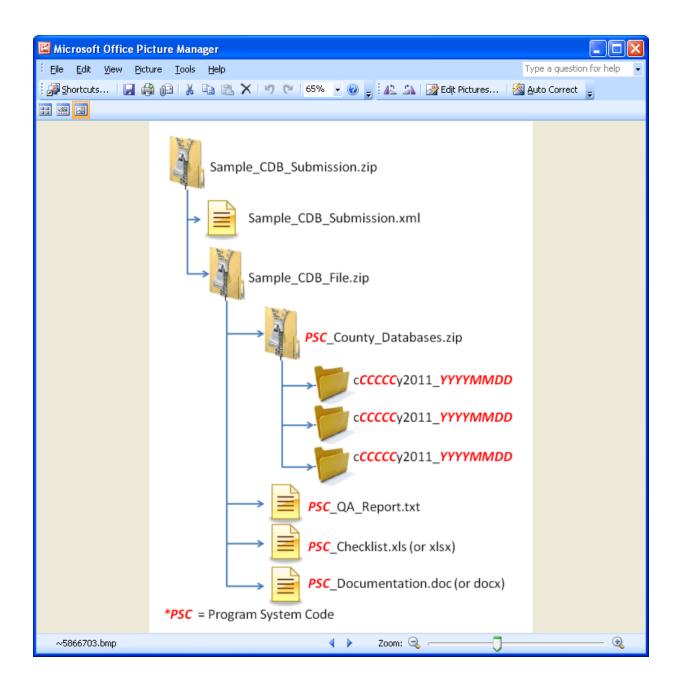
If you created the CDBs from scratch (not editing the EPA provided CDBs), please document where local data was used and where default data from MOVES was used.

You may include additional documentation files which are referenced by the main documentation. These additional files can be in any format (e.g., .pdf or .xls).

Name your documentation with your agency ProgramSystem Code (PSC), such as "PSC_Documentation.doc (or docx)". For example, Delaware's state agency PSC is "DEDNR" and their documentation would be named "DEDNR_Documentation.doc". Any additional files provided can keep their original names and do not need to conform to any standard.

1.2.5 Bundle CDB Submittal Components and Create the XML for EIS Submittal

Once you have prepared the parts of your submittal, you'll need to zip them together in a specific way and reference them with the EIS/CDX required XML file. The CDBs are folders located in the MySQL/data directory on your system. Once you have completed creating/editing the CDBs for your state, these folders and their contents are to be included in the zip file for submission. The graphic below shows that the individual CDBS are zipped into one zip file. That zip file and the remaining parts (QA report, checklist, and documentation) are then zipped into a zip folder.



1.2.5.1 Creating the EIS/CDX-required XML

There are two ways to create the xml file

1. Use notepad or other editing software to edit the sample xml [cdb_sampleheader.xml] which you can download from the 2011 NEI webpage.

Edit the red text shown below:

```
<hdr:Document id="IDxx" xmlns:hdr="http://www.exchangenetwork.net/schema/header/2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
                         xsi:schemaLocation="http://www.exchangenetwork.net/schema/header/2 http://www.exchangenetwork.net/schema/header/2/header v2.0.xsd"
    <hdr:Header
       <a href="hdr:AuthorName">hdr:AuthorName</a>
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- 2. Use the staging tables from the EIS Bridge Tool (as revised June 2012) and populate only the CERS and HeaderExchange tables as follows:
 - a. CERS table:
 - -User ID (EIS login)
 - -Program System Code
 - -Emissions Year
 - b. ExchangeHeader table
 - -Author Name (not ID)
 - -Organization Name
 - -Document Title (EIS)
 - -Data Flow Name (EIS v1 0)
 - -Submission Type (QA or Production)
 - -Property-Data Category (Onroad)
 - Property-CDB Data File (Name of your CDB Submittal File, e.g.,
 - "DEDNR CDB File.zip")

NOTE: Each CDB submittal is a total replacement to any CDBs previously submitted by that agency. Thus, if a state submits every county in one submittal, then submits only one county in a subsequent submittal, only the one county will be present in EIS.

1.3 Additional Resources

For additional Assistance contact

Submittal Issues

-Sally Dombrowski – dombrowski.sally@epa.gov; 919-541-3269

Inventory Issues

-Laurel Driver – driver.lauel@epa.gov; 919-541-2859

CDB Content Issues

-David Brzezinski – Brzezinski.david@epa.gov, 734-214-4235

MOVES Issues

-mobile@epa.gov